



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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OFFICE OF THE
REGIONAL ADMINISTRATOR

May 15, 2012

Mark Hasselmann
Federal Highway Administration
Edmund S. Muskie Federal Building
40 Western Avenue, Room 614
Augusta, Maine 04332

RE: I-395/Route 9 Transportation Study Draft Environmental Impact Statement, Brewer, Holden, Eddington, and Clifton, Maine (CEQ# 20120070) and U.S. Army Corps of Engineers Public Notice NAE 2001-02253.

Dear Mr. Hasselmann:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), Section 404 of the Clean Water Act, and Section 309 of the Clean Air Act (CAA), we have reviewed the Federal Highway Administration and Maine Department of Transportation (MaineDOT) Draft Environmental Impact Statement (DEIS) for the I-395/Route 9 Transportation Study Draft Environmental Impact Statement.¹

The DEIS details plans by MaineDOT to evaluate transportation alternatives to "improve regional system linkage, relieve traffic congestion, and improve safety along Routes 1A and 46, and to improve the current and future flow of traffic and the shipment of goods to the Interstate system." The project is proposed in the towns of Brewer, Holden, Eddington, and Clifton, Maine.

The DEIS considers the No Build alternative, and three build alternatives. The build alternatives (Alternative 2B-2, Alternative 5A2B-2, and Alternative 5B2B-2) were selected for study following an extensive interagency coordination process led by MaineDOT that began in 2001. EPA was an active participant in that process as a cooperating agency. During that time EPA offered recommendations to help reduce impacts of the project. Our work included review of pre-publication draft sections of the DEIS. The DEIS incorporates many changes made in response to our input. Although the DEIS preferred alternative is not without impacts to wetlands and other aquatic resources, MaineDOT is to be complimented for their efforts to modify the project to avoid direct and secondary impacts to aquatic resources.

¹ We note that the DEIS has also been prepared to serve as a preliminary Section 404 Permit Application to the U.S. Army Corps of Engineers (Corps). The Corps Public Notice requests input regarding the determination of which alternatives should be carried forward to a "future final permit application" for a Section 404 permit. This letter offers general comments in response to that request. EPA will also comment on any future applications filed with the Corps for the project.

The three build alternatives were selected as they generally meet the project purpose and need and provide reasonable opportunities to reduce overall impacts, especially those to the aquatic environment. The three build alternatives were also advanced by the interagency group as they would result in far less impact than other alignments that were screened (especially the so-called Family 3 Alternatives through the center of the study area). More specifically, MaineDOT's serious consideration of EPA's comments (and those of other involved federal agencies) led to the transformation of the project from a 10-mile 4-lane bypass highway with 50 acres of wetland fill and significant secondary impacts (to over 100 vernal pools and large undeveloped forest blocks) to a 10-mile 2-lane bypass that would fill 26 acres of wetland and result in more reduced secondary impacts to vernal pools and unfragmented habitat. As a result of the project changes, it appears that one of the three build alternatives analyzed in the DEIS would likely be the Least Environmentally Damaging Practicable Alternative (LEDPA). MaineDOT and FHWA have identified Alternative 2B-2 as the preferred alternative in the DEIS due to its ability to satisfy the project purpose and because they believe it has the least adverse environmental impact. EPA supports the evaluation of these three build alternatives through the NEPA process and by the Corps as they work to determine which is the LEDPA.

Our attached comments highlight several areas of the DEIS where additional information or clarification is necessary to more fully describe impacts of the proposed alternatives. Specific issues described in the attachment focus on the development of a more comprehensive wetland mitigation plan, refinement of the induced growth analysis, a request for air quality mitigation measures during construction and suggestions to help improve the protection of water supplies in the project area. Based on our review of the DEIS and the need for additional information, and in accordance with EPA's national rating system (a description of which is attached to this letter) we have rated the DEIS EC-2-"Environmental Concerns-Insufficient Information."

We appreciate the opportunity to participate in interagency workgroup meetings to discuss the project to date and to provide our comments on the DEIS and Corps Public Notice. We encourage MaineDOT and FHWA to continue to seek input from local, state and federal agencies and the public as the NEPA/404 process advances. We will continue to participate in the process as a cooperating agency and will review new information as it is developed and will continue to help MaineDOT address outstanding issues as the NEPA/404 processes advance for the project.

Please feel free to contact me or Timothy Timmermann of EPA's Office of Environmental Review at 617-918-1025 if you wish to discuss these comments further.

Sincerely,

A handwritten signature in black ink, appearing to read "H. Curtis Spalding".

H. Curtis Spalding
Regional Administrator

Enclosures

cc:

Jay L. Clement, Senior Project Manager
U.S. Army Corps of Engineers New England District
Main Project Office
675 Western Avenue #3
Manchester, Maine 04351

Russell D. Charette, P.E.
Maine Department of Transportation
Director, Mobility Management Division
Bureau of Transportation Systems Planning
16 State House Station
Augusta, Maine 04333

Summary of Rating Definitions and Follow-up Action

Environmental Impact of the Action

LO--Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC--Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO--Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1--Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3--Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

Additional Detailed Comments
Interstate 395 / Route 9 Transportation Study
Draft Environmental Impact Statement
Brewer, Holden, and Eddington, Maine

Wetland Issues

Setting

The transportation study area is located in the lower Penobscot River watershed. Numerous project area streams and freshwater wetlands drain to tributaries and ponds that flow into the Penobscot River. The fisheries in the lower Penobscot River include valuable species such as Atlantic salmon, alewife, striped bass and brook trout. These streams and the associated riparian zones serve as wildlife corridors between the streams and nearby undeveloped land. Wetlands within the study area cover approximately 30 percent of the landscape, provide valuable wildlife habitat and help maintain regional water quality. The interior of the study area includes large undeveloped areas that contain large wildlife habitat blocks, high value wetlands, and vernal pools.

Alternatives

MaineDOT worked with EPA, the Corps of Engineers, the United States Fish and Wildlife Service and others to screen more than 70 build alternatives that could possibly meet the project purpose and need. At the conclusion of the interagency screening effort, four alternatives, including the no build alternative, were selected for evaluation in the DEIS. The build alternatives (Alternative 2B-2, Alternative 5A2B-2, and Alternative 5B2B-2) were selected for further study as they generally met the project purpose and need and provided reasonable opportunities to reduce overall impacts, especially those to the aquatic environment. EPA concurred with the selection of these three alternatives for analysis in the DEIS (and eventually by the Corps of Engineers in their permitting review) as they would result in far less impact than other alignments (especially the so-called Family 3 Alternatives routed through the center of the study area) that were evaluated and then dropped from further consideration.

Impacts

All three of the build alternatives evaluated in the DEIS would result in similar adverse impacts to the aquatic environment. The preferred alternative would fill 26 acres of wetland over ten miles of roadway and impact 10 acres of floodplain and 554 linear feet of stream for roadway crossings. All three build alternatives would either fragment or eliminate habitat blocks in the study area. The potential for indirect impacts to aquatic resources from the three build alternatives are somewhat minimized due to their general proximity adjacent to areas already impacted by past land use/development and away from large undeveloped habitat blocks to the interior of the study area.

Mitigation

Finally, we note that no specific mitigation proposals to address impacts to the aquatic environment are provided in the DEIS. Instead, the DEIS briefly discusses general compensatory mitigation opportunities for the project. While EPA generally agrees with

the basic mitigation concepts outlined in the DEIS, we believe more detail should be provided in the FEIS regarding wetland mitigation. Moreover, a detailed mitigation plan will also need to be developed to support any future permitting effort by the Corps under the Clean Water Act. We request the opportunity to participate in the development of the wetland mitigation plan (with the interagency workgroup) as the project continues to advance through the NEPA and Section 404 review.

Induced Development or Growth

The analysis of induced growth in the DEIS is based on an assumption that since the roadway is intended to serve long-distance, through- and regional-traffic, the development induced by the alternatives is likely to be traveler-oriented businesses such as gas stations and convenience stores within approximately a half mile of the interchanges. Although the new roadway may be intended to serve this kind of traffic, it is unlikely that that is the only traffic that will use the road, and therefore the assumption on which the analysis is based may be flawed. Further, there is no information presented to justify the projection that induced development will be restricted to a half-mile radius around the interchanges. The Oregon DOT methodology cited does not prescribe a half-mile radius, but instead indicates that the size of the study area should depend on the results of the preliminary traffic analysis. Larger travel time savings, new transportation corridors, and significant amounts of vacant land within ½ to 1-mile of the project suggest a larger study area for indirect impacts. In development of the FEIS, FHWA and Maine DOT should reconsider what size study area makes sense given local development patterns, commuting patterns, transportation demand, and other factors, and if needed, re-do the analysis.

We also disagree with the statement that “[b]ecause commercial and residential development would occur without implementation of a build alternative, it would not be considered a secondary impact solely related to the build alternatives.” Simply because land is zoned for a particular purpose does not mean that it will be developed, at least in the foreseeable future. An analysis of induced development should estimate the development that would be induced by the transportation improvements and would likely not occur ‘but for’ the transportation improvement, at least through the design year.

Further, we believe the FEIS should include an assessment of the environmental impacts of induced development. These impacts are only addressed in a very general manner in the Cumulative Impacts section, and should be quantified to the extent possible in the FEIS. For example, the increased runoff and contaminant loading caused by the increase in impervious surfaces could be estimated.

Finally, we note that part of the preferred alternative uses a portion of an existing roadway (Route 9). Future development along this road (while the project awaits funding) could undermine system linkage and improved overall traffic flow and safety goals for the project. We encourage Maine DOT to work creatively with the town of Eddington to develop a strategy to preserve rights along this portion of the road (and

possibly control the number of future driveway cuts) until funding becomes available for the project.

Cumulative Impacts

We find no information in the DEIS to support the statement that residential and commercial development likely would continue to occur at the same rate and with the same characteristics with either the No-Build Alternative or one of the build alternatives. We recognize that growth rates in this study area are slower than in other parts of the state and region, but transportation projects have a long and well-known history of affecting development patterns, which is why we recommend refinement of the induced growth analysis to address this issue in the FEIS.

Air Quality

The I-395/Route 9 Transportation Project will be located in a portion of Penobscot County, Maine which is in attainment for all National Ambient Air Quality Standards (NAAQSs). Therefore transportation and general conformity requirements are not applicable. The air quality issue of concern associated with the construction and implementation of the proposed highway project is emissions from construction equipment (trucks and other nonroad equipment).

Reducing emissions from diesel engines is one of the most important public health challenges facing the country. EPA has finalized a number of clean fuel and vehicle emissions standards that will lead to dramatic emission reductions in new diesel-powered engines. Included within these rulemakings are cleaner fuel requirements, such as the use of ultra-low sulfur diesel, which will provide immediate emissions reductions in both new and older diesel engines. However, even with more stringent heavy-duty highway and nonroad engine standards set to take effect over the next decade; millions of diesel engines already in use will continue to emit excessive amounts of diesel exhaust which contribute to serious public health problems.

Emissions from older diesel engines can be controlled through: 1) strategies and technologies that reduce unnecessary idling, including auxiliary power units and the use of electric equipment; and 2) the use of advanced pollution control technology such as diesel oxidation catalysts or particulate filters that can be installed on the exhaust of the diesel engine. Retrofits have been successfully applied to many diesel engines across the country.

Given the public health concerns about diesel exhaust from heavy duty diesel trucks and other heavy duty construction equipment, EPA encourages FHWA and Maine DOT to commit to the use of diesel retrofits, cleaner fuels, and idle reduction measures to minimize emissions from diesel construction equipment. Retrofit technologies may include EPA verified emission control technologies and fuels and CARB-verified emission control technologies. A list of these diesel exhaust control technologies can be accessed at <http://epa.gov/cleandiesel/verification/verif-list.htm>. In addition, the

Northeast Diesel Collaborative has prepared model construction specifications to assist in developing contract specifications that would require construction equipment to be retrofitted with control devices and use clean fuels in order to reduce diesel emissions. The model construction specifications can be found on the Northeast Diesel Collaborative web site at URL address <http://northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf>. We recommend that the project construction specifications be developed to incorporate these measures.

Drinking water supplies

The Preferred Alternative 2B-2 does not fall within any existing source water protection areas (SWPAs) in the study area. However, Alternative 5A2B-2 does fall within the 300-foot radius SWPAs for the Town & Country Motel (ME0007374) and the Traditional Golf Club (ME0094662). Therefore, effective BMPs to reduce the impacts from storm-water discharges and accidental spills of hazardous materials should be designed and implemented before, during and after highway construction along this route. For example, subsurface gravel wetlands have been found to be highly effective in mitigating metal and nutrient contaminants in storm water. We recommend that you refer to the University of New Hampshire Stormwater Center (link below) for more details about construction and performance of this BMP:

http://www.unh.edu/unhsc/sites/unh.edu.unhsc/files/pubs_specs_info/unhsc_gravel_wetland_specs_6_09.pdf

In addition, storm water outfalls should be located as distant as possible from public and private supply wells. MaineDOT is responsible for private well road salt contamination, and well proximity to road surfaces is a key factor for potential road salt contamination. We also recommend that low-salt deicing practices be strictly observed by MaineDOT along the entire corridor to minimize impacts to aquatic life and in particular in SWPAs that fall within the road alignments. We also recommend that MaineDOT work to monitor current chloride concentrations in receiving waters in the project corridor to establish a baseline against which project impacts can be tracked and evaluated. EPA has experience working with other New England DOTs to establish monitoring protocols and encourages MaineDOT to coordinate further with us on this issue. Please contact Doug Heath, a hydrogeologist with EPA New England (617-918-1585), for assistance with the development of an acceptable baseline monitoring plan for the project.

MaineDOT and the FHWA should contact the Maine CDC - Drinking Water Program and the Maine Geological Survey for additional information to help design a project that avoids and minimizes the potential for impacts to drinking water sources. Their contact information:

For Public Drinking Water Supply Locations and Source Water Protection Restrictions

Andrews Tolman
Maine Source Water Coordinator
Maine CDC - Drinking Water Program
11 State House Station
Augusta, ME
(207) 287-6196
Andrews.L.Tolman@maine.gov

For Private Well Location Data

Maine Geological Survey
22 State House Station
Augusta, Maine 04333
Phone: (207) 287-2801
Fax: (207) 287-2353
E-mail: mgs@maine.gov

Surface Water

The Preferred Alternative 2B-2 and Alternatives 5A2B-2 and 5B2B-2 will impact the Penobscot tributaries (from south to north) Felts Brook, Eaton Brook, a pond west of Day Road, an unnamed stream and associated wetlands in Eddington north of the NW corner of Holden Township, and Meadow Brook. We recommend that effective BMPs be implemented during and after highway construction to reduce the water-quality impacts of storm-water discharges to surface water resources. Please contact Doug Heath, a hydrogeologist with EPA New England (617-918-1585), for assistance with the development of effective BMPs for the project.